

EXHIBIT D

SAY GOODBYE TO

TRUSTED TO PROVIDE OVER
3,400,000,000
 3D LIVENESS CHECKS ANNUALLY

3D LIVENESS, KYC & 3D FACE VERIFICATION SOFTWARE

Certified Anti-Spoofing + \$600,000 Spoof Bounty Program
 Leading 3D Face Matching: 1/125M FAR + UR Codes



Try the *FaceTec Demos Now:*

Available on the App Store | Get it on Google Play | Try FaceTec on your Webcam

3D Liveness, Photo ID Scan, NFC, Matching & Age Checks for >10 Billion Smart Devices & Webcams.

Ends Identity Theft & User Fraud. UnSharable, UnPhishable & Virtually Spoof-Proof.

Patented ZoOm-in FaceScan® Creates a 3D FaceMap® with a 2-Second Video-Selfie.

FaceTec Anchors Digital Identity

UR Codes, 3D Liveness, OCR, Barcode/NFC for KYC Onboarding + 3D Face Matching for Ongoing Re-Verification



FaceTec proves the Correct User is physically present by Matching them to their ID Photo or 3D FaceMap.

Frictionless Security for Real Users

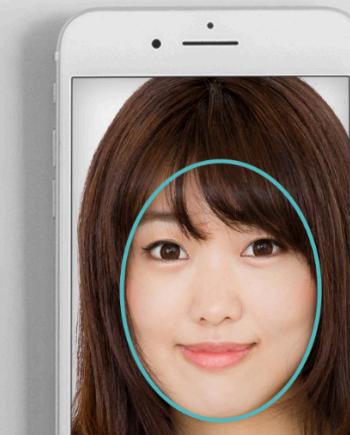
Liveness Checks, Face Matches & Photo ID Scans are now fast, easy, and secure for everyone, regardless of their device. During onboarding, FaceTec's software records a quick video-selfie, verifies 3D Liveness, matches the 3D FaceMap® to the photo on the ID, OCRs ID text, checks for signs of ID tampering, and scans other enrolled 3D faces for duplicates. Upon their return, another video-selfie confirms the user's 3D Liveness and their new 3D FaceMap is compared to the old one from onboarding. If they match, the positively identified user can be granted account access. Watch the [5-Minute Video Tour](#)

Brick Wall for Bad Actors

Use your 3D face to unlock anything from a car door to a bank account. Real users get easy access, but bad actors and bots are rebuffed by anti-spoofing AI certified by a NIST/NVLAP lab and relentlessly tested via our \$600,000



Spoof Bounty. FaceTec is the industry leader that invented the 3D FaceMap, the 3D biometric modality created solely to provide the most secure, intuitive, and cost-effective biometric security for remote digital identity.



WORKS IN REAL-WORLD
LIGHTING CONDITIONS



GREAT WITH GLASSES, MAKEUP & BEARDS

Certified Liveness + 3D Face Matching
Try the FaceTec Demo Apps



SECURITY CERTIFIED #1 IN THE WORLD



Can a Simple Selfie Really Provide Security?

No, because 2D photos of most people are available all over the Internet. But FaceTec isn't just a "selfie"; it's a real-time 3D FaceScan that collects time-stamped, un-reusable Liveness data and creates a 3D FaceMap, which IS NOT publicly available online. FaceTec's software isn't fooled by photos, masks, or deepfakes, and ensures that the user is actually physically present.

FaceTec's Liveness Detection AI must observe so many concurrent human traits that spoof artifacts are unable to recreate them all in real-time. For ongoing user re-verification, FaceTec's 3D face matching compares a new Liveness-proven 3D FaceMap with the user's previously-stored 3D FaceMap. If they match highly (1/125M FAR), the user can be granted access.

Try our [\\$600,000 Spoof Bounty Program](#) for yourself!

FaceTec's Encrypted 3D FaceMaps:

- Can't Be Phished From Users
- Aren't a Biometric Honeypot
- Stop Credential Sharing
- Stop Botnet Attacks
- 1:1 Match at 1/125M FAR

Time-Stamped 3D Liveness = No Security Honeypot Risk

Two types of data are required for every face verification: 3D Face data for matching and real-time 3D Liveness data to prove the Face data was collected from a physically present person. 3D Liveness data is time-stamped, valid

- 1:N De-duplicate up to 1/1B FAR
- Match 2D Photos up to 1/2M FAR
- Provide Anonymous Age Checks

Want To Learn More?

[Read The WHITE PAPERS](#)

only for a few minutes, and can be deleted immediately.
New 3D Liveness data must be collected for every subsequent 3D FaceScan.

FaceTec's Customers don't create security honeypot risk by storing 3D FaceMaps because they contain "face data" without the Liveness data required in a new 3D FaceScan session, so they cannot be re-used to spoof FaceTec's 3D Liveness AI.

HOW FaceTec WORKS

As the camera's view of the 3D user changes, it observes perspective distortion in the video. FaceTec's AI processes the 100+ frames over two-to-three seconds and then interpolates that data into a 3D FaceMap from any .3MP+ 2D camera.

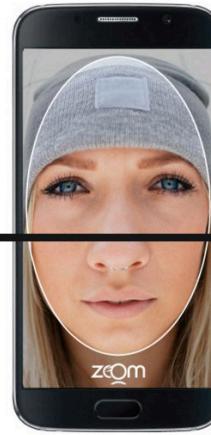
UnZoMed view 12 inches away

NORMAL, NO DISTORTION



ZoMed view 7-8 inches away

FISH-EYE, PERSPECTIVE DISTORTION



CERTIFIED LIVENESS DETECTION

We've devoted more time to anti-spoofing than anyone, ever. Over nearly a decade we've performed hundreds-of-millions of spoof attempts with every conceivable type of media and learned how to stop them. For more info see: www.Liveness.com

Attack Vectors include:

- 2D paper photos & digital images
- High resolution videos
- Paper masks with eye & mouth cutouts
- Hollywood masks, wax figures & lifelike dolls
- Photos or video frames animated into avatars
- Video projections on 3D heads
- Sleeping users with closed eyes
- Device Emulators & Virtual Camera programs
- Impostors, lookalikes & doppelgangers
- Hardware Video Injection adapters

Operating a [Spoof Bounty Program](#) since October 2019, and passing NIST/NVLAP Lab Level 1 & 2 PAD testing with 0% FAR years before that is proof that FaceTec is the biometric modality that is virtually impossible to fool using today's media technology.



UR® CODES

What are UR Codes?

UR Codes contain digitally signed biometric data and enable privacy-preserving in-person and remote Identity Verification. Codeholders can prove, with high confidence, their legal identity, age, and right to access their accounts or privileges, both in-person and remotely. Because they store unique, signed face data, personal info, and legal identity data, UR Codes enable secure, low-cost, two-party identity verification at unlimited scale.

Learn More at URCodes.com and in the [Intro to UR Codes.pdf](#)

Look for the UR Code Seal for secure remote identity verification:



View the [UR Code Developer Docs](#) here



Immutably bind Anyone to their identity data from any Issuing Authority (DMV, school, employer, etc.).

BIOMETRIC BEST PRACTICES



- ▶ Demand 3D Liveness Detection backed by a Spoof Bounty Program. Without it, you cannot trust unsupervised users and will be put at risk by images on Facebook/Google/YouTube, and those in data breaches. With strong 3D Liveness & 3D Matching, 2D photos stored online (or breached) can't be leveraged against your users. [Whitpaper](#)
- ▶ Delete Liveness Data after each login and collect new Liveness Data for every new session. This prevents biometric honeypots and allows for safe, centralized biometric storage. See www.Liveness.com
- ▶ You store all of your User's biometric data & PII on your servers which run FaceTec's software inside your firewall. 3D is the only way to verify biometric identity remotely, enable cross-platform logins, simplify device upgrades, & allow multiple users /device.
- ▶ Only true 3D Algorithms that measure the shape of the user's face can be unbiased to skin tone. FaceTec trained its 3D Algorithms with the help of over half-a-million volunteer testers from over 180 countries.
- ▶ Get the Acuity Research Report: [Face Verification & Liveness Synonymous with Remote Onboarding](#)

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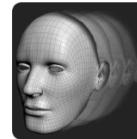
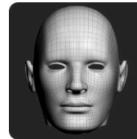
Try FaceTec on your
Webcam

2D VS. 3D FACE MATCHING

2D Matching will never have the accuracy needed for true Unsupervised Identity Verification. There's just too much variability in how the same 3D human face appears when flattened into 2D at different image capture distances. This variability creates significant overlapping

SIMILARITY BETWEEN THE 2D FEATURES OF DIFFERENT HUMANS AND CONFUSES THE 2D ALGORITHMS,
preventing them from achieving highly accurate FARs at usable FRRs.

Apple, Google, and Intel understand this, so their 3D Face Matching systems use 3D infrared cameras, but that, of course, requires each device to include special hardware. In contrast, FaceTec securely performs 3D Matching from virtually any device with a 2D camera.

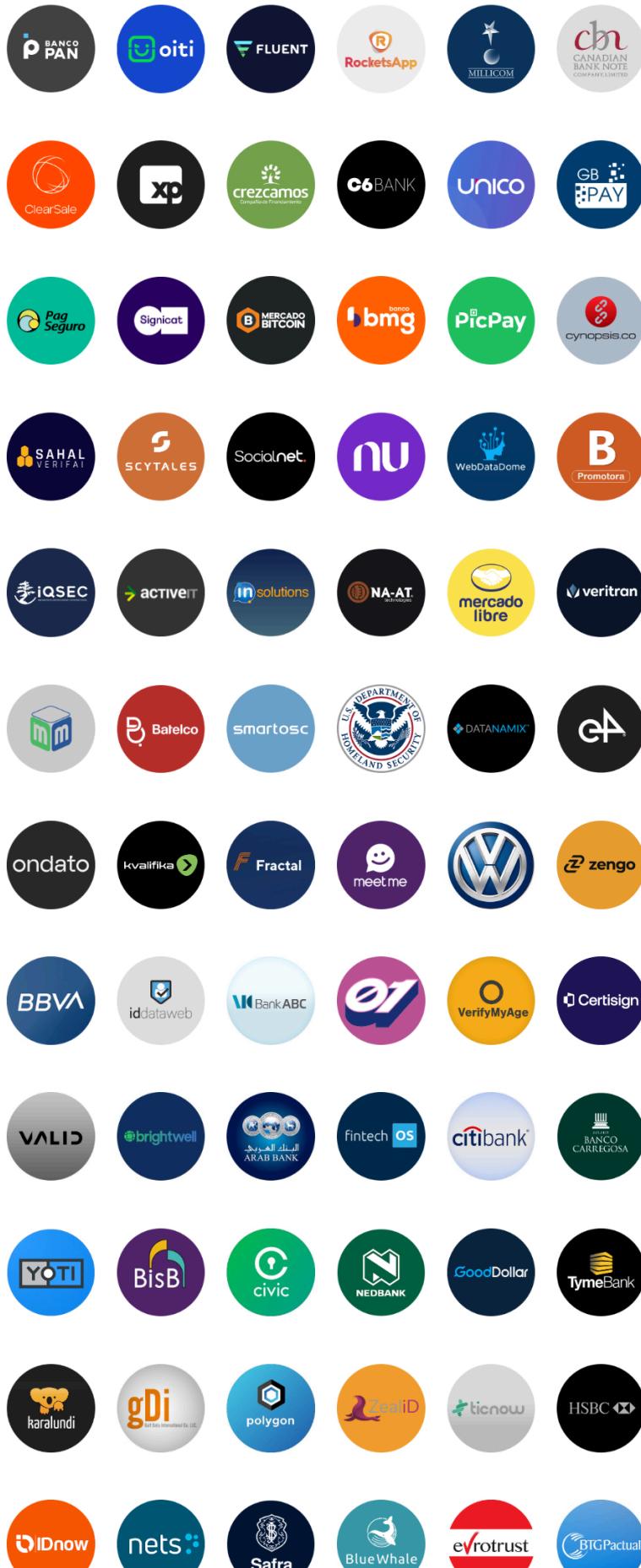


TYPE	2D SOFTWARE	3D HARDWARE	FaceTec® 3D SOFTWARE
AXES	X,Y	X,Y,Z	X,Y + TIME
Vendors	Aware, BioID, Daon, FacePhi, Idemia, iProov, ID R&D, etc	Apple FaceID, Google Pixel 4, Intel RealSense®	FaceTec + > 90 Channel Partners Worldwide
Purpose	Face Matching	Unlock Mobile Phones	3D Face Matching
Installed Base	10+ Billion Smart Devices (Android-85% + iOS-14% & Webcams)	Only new iPhones have FaceID & Pixel 4 = < 12% of market	10+ Billion Smart Devices (Android-85% + iOS-14% & Webcams)
Portable Biometric	Varies	None, re-enroll on each device	Cross-Device & Cross-Platform
Technology	Legacy 2D Matching Software	Hardware: Infrared Camera Array & Neural Network Chip	Software: Real-time Computer Vision + 100% proprietary AI
Interface	Varies	Glance to unlock phone	3D Video Selfie: ~2 Seconds
Skin Tone Bias	Most 2D Algos have bias at published FARs	None-Reported	None observable in the Lab or Real-World usage
Device SDK Info	Varies	No SDK possible, special hardware required	Device SDKs for Android/iOS, web + Server SDK
Liveness Method	Blink, Smile, Turn Head or Flashing Lights, etc	Infrared dots + neural network chip determine if user is 3D	Measures 3D Depth, skin texture, eye reflections, etc
Liveness Strength	Fairly Weak	Fairly Strong	Very Strong
3D Depth Detection	Weak	Very Strong	Very Strong
Intellectual Property	Legacy tech, too old for meaningful patents	20+ infrared related patents acquired in 2013	20+ Patents on 3D process issued globally
FAR/FRR	Varies, but 1/<75,000 at real world usable FRRs	1/1M - No FRR stated	1/125,000,000 FAR @ <1% FRR
Identical Twin Differentiation	Very Weak	"If you have a Twin, use a PIN."	High 1:1 FAR provides Best Possible Twin Differentiation
Liveness Testing Certifications	No, only non-standardized conformances, no camera feed security tested	No Official 3rd Party Testing	Certified Level 1 & 2 Spoof Detection by NIST/NVLAP LAB - Liveness.com
Age Estimation	2D = poor Age Estimates	Not Available	"Better than Human" Face-only Anonymous Age Estimation
Match to Photo ID	Low-detail & problems with aged photos = low match rates	Not Available	Up to 1/2,000,000 Match Confidence with 3D:2D
Password Replacement?	Not secure enough, Liveness too Weak & FAR too low	No, only used for convenience	Yes, universal device support, highly secure & convenient
Spoof Bounty Programs?	No, 2D is easily spoofed	No, no motivation	\$600,000, SpoofBounty.com

CLIENTS & PARTNERS

FaceTec is proud to highlight a few of the hundreds of organizations around the world utilizing our leading biometric security software.







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Available on the
App Store

Get it on
Google Play

Try FaceTec on your
Webcam

DEVELOPERS: USE THE BEST BIOMETRIC

Thoroughly test 3D Liveness, 3D Face Matching, Age Estimation, Photo ID OCR & Barcode / NFC Scanning instantly with a [FREE Developer Account](#).

[Get your FREE Developer Account](#)



- Supports iOS 12+ & Android 5+ devices & webcams
- Available in 30+ languages, easy to localize
- Portable, cross-device, cross-platform 3D Face Matching
- Unrivaled 3D Liveness Security, Certified PAD Levels 1&2
- False Acceptance Rate (FAR): 1/125,000,000 @ <1% FRR
- All Data Processed & Stored on YOUR Server or Cloud
- NONE of Your Production User Data is sent to FaceTec
- Photo ID OCR & Barcode / NFC Scanning included
- Lightweight & easy-to-integrate SDKs (~4MB)
- Start fast with our straightforward RESTful API
- Codebase Tested by [Praetorian Security](#)

View the FaceTec Software – [Configuration Options](#)

Available for organizations of all sizes – [Get Pricing](#)

Ready to get started for FREE?

[Get a FREE Developer Account](#)

FaceTec PRICING

FaceTec is available to organizations of all sizes, but they must run the FaceTec software on their servers and will be billed monthly for 3D Liveness usage (minimum monthly commitment required). In addition to many other free features, FaceTec Customers & Partners get [Unlimited Photo ID Scans for KYC/AML](#) for free. If your organization can't afford FaceTec's monthly minimums, there are numerous FaceTec distribution Partners who will provide access to FaceTec's ID Scan software without ANY monthly minimum commitments whatsoever. Please contact FaceTec for a full list of participating Partners.

FaceTec's Demo & Sample Apps Are Free for:

- Organizations To Try the UI
- Internal POCs (proof-of-concept)
- Developer Software Testing
- Business Development Demos

FaceTec Invoices Per 3D Liveness Check, or Per User for

- Large & Small Businesses
- Enterprise Accounts
- Government Agencies
- Not-For-Profits

[Get A Pricing Quote](#)

*Certified Liveness + 3D Face Matching
Try the FaceTec Demo Apps*



CASE STUDIES & RESOURCES

Learn more about Certified 3D Liveness and 3D Face Matching's use cases, security and 3rd-party testing, below.

Case Studies:

- FaceTec® - ZenGo Wallet Case Study [🔗](#)
- FaceTec® - Turbi Car Sharing Case Study [🔗](#)
- FaceTec® - IAV Smart Car Case Study [🔗](#)
- & Hundreds More Clients Worldwide [🔗](#)

White Papers & Interviews:

- 3D:3D Matching Report: 1/125M FAR@<1% [🔗](#)
- 3D:2D IDScan Face Matching Report [🔗](#)
- \$600,000 Spoof Bounty Program Details [🔗](#)
- FaceTec's 2024 Liveness Security Report [🔗](#)
- NIST FRVT-PAD Testing Commentary [🔗](#)
- [FindBiometrics Interview: FaceTec CEO](#) [🔗](#)

Tests & Resources:

- FaceTec - Identity Check: Photo ID Match [🔗](#)
- FaceTec - Private Cloud Architecture [🔗](#)
- FaceTec - Govt Remote ID Verification [🔗](#)
- ENISA - 2024 EU ID Proofing Guidelines [🔗](#)
- BIXELAB - 3D:2D Face Matching Test [🔗](#)
- BIXELAB - Level 2 PAD Testing [🔗](#)
- Developer Documentation & Demos [🔗](#)

Independent 3rd-Party Testing & Certifications



OWASP: Black & White-Box Pen Testing
FaceTec SDK Penetration Test Summary [🔗](#)



ISO 30107-3: Level 1 Spoof Detection [🔗](#)
EPCS-DEA: Biometric FAR Certification [🔗](#)



ISO 30107-3: Level 2 Spoof Detection [🔗](#)
\$600,000 Spoof Bounty Program Levels 1-5 [🔗](#)

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PRESS LINKS



Outdated biometric liveness tests create 'false sense of security,' FaceTec argues
September 18, 2024

Biometrics are replacing legacy knowledge-based authentication for remote and unsupervised authentication scenarios.

[READ MORE](#)



FaceTec Clocks 2.6B Annual Liveness Checks, Other Milestones in 2024 Liveness Detection Security Report

September 17, 2024

FaceTec has published its 2024 "Liveness Detection Security Report", detailing a number of achievements going back to the start of...

[READ MORE](#)

THE PAYERS



FaceTec unveils UR codes for identity verification

September 6, 2024

The technology is designed to enhance the security and accuracy of online identity verification, a process that has faced...

[READ MORE](#)

VIDEO – Over a billion people verify their identities using FaceTec's 3D FaceScans

September 5, 2024

3D face liveness and matching is far superior than what else is out there, say Jay Meier, Senior Vice...

[READ MORE](#)

PAST ARTICLES

September 2024

FaceTec introduces scannable protocol for privacy-preserving biometric online IDV

[September 5, 2024](#)

September 2024

ID Talk: How to Make Biometric Data Useful – and Useless – with FaceTec's Jay Meier

[September 4, 2024](#)

September 2024

FaceTec's 'UR Codes' Offer Transformative Potential—for Free

[September 4, 2024](#)

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ID Talk: How to Make Biometric Data Useful – and Useless – with FaceTec's Jay Meier

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[Press Archive](#)

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ABOUT FACETEC

Founded in 2013, FaceTec is the world leader in 3D Face Liveness & Matching software with staff in the United States, Canada, United Kingdom, Brazil, Portugal, Singapore, Mexico, and over 100 Channel Partners globally.

Management Team



Kevin Alan Tussy - CEO

Systems architect, 4-time tech founder with +30 issued patents, Editor-in-Chief: Liveness.com
[LinkedIn](#)



Josh Rose - CTO

Advisory Board



Alfred Koh - CEO Microsoft Korea

Former CEO of Samsung SDS, Hewlett-Packard Malaysia and IBM
[LinkedIn](#)



Patrick Flynn - Fritz Duda Family Professor of



Top 3D face matching, liveness and artificial intelligence expert, formerly with Microsoft
[LinkedIn](#)



Engineering
Computer Science & Engineering at Notre Dame
[Google Scholar](#)



Satya Yenigalla - COO
M.S. (Computer Science), formerly with Samsung, Oracle, Cloudscape/IBM
[LinkedIn](#)



Kevin Bowyer - Schubmehl-Prein Professor
Computer Science & Engineering at Notre Dame
[Google Scholar](#)



Trevor Chaplick - CLO & EVP, Corp. Dev
Former Head - Wash., DC Corporate & Securities practice of Greenberg Traurig. Former Managing Partner - DC offices of Proskauer & Wilson Sonsini
[LinkedIn](#)



Chad Miller - Partner at Miller IP
Juris Doctorate (Intellectual Property), Lewis & Clark Law School, B.S. (Elec. Engineering), UNLV
[LinkedIn](#)



Geoff Slagle - EVP, Digital Identity
+25 year Digital Identity Veteran. Formerly with Scytáles AB, AAMVA, Intelli-Check, US State Dept
[LinkedIn](#)



Terry A. Coffing - Board Member
Former co-chair of litigation at Marquis Aurbach Coffing. Serves on the Board of Governors of the Nevada State Bar. 2021 "Lawyer of the Year" for 1st Amendment Law & The Best Lawyers in America© 2015-2022 - Commercial Litigation.
[LinkedIn](#)



Owen McShane - VP Government Relations
Adjunct Prof. College of Homeland Sec. & Cybersecurity. Former Deputy Com. NY DMV, NYS FOP, Intl. Chiefs of Police Assoc. & AAMVA



Ken Ashworth - Ken Ashworth & Associates
Doctor of Law (J.D.), Pepperdine University School of Law, B.S. (Accounting), So. Utah University
[LinkedIn](#)



John Bernhard - Chief Scientist
M.S. (Computer Science), University of Notre Dame, M.S. (Statistics), Stephen F. Austin State University, B.S. (Mathematics & CompSci), Rose-Hulman Institute of Tech., formerly with Verizon
[LinkedIn](#)



Michael Friedman - Advisor & Board Member
Investor & Advisor. Formerly with Darden Restaurant Group, and Gulf Channel. Graduate of Tulane Law School.
[LinkedIn](#)



Gregory Perez - VP of Engineering
B.S. (Computer Science), UCSD, formerly with GLIT and Microsoft
[LinkedIn](#)



Andrew Hughes - VP of Global Standards
Chair of the Kantara Initiative Board, Identity Assurance Work Group, and Deepfakes/AI Impact on ID Verification Systems group
[LinkedIn](#)



Jase Kurasz - Sr. Algorithm Dev. Engineer
M.S. (Computer Science), DePaul University, B.S. (Electrical Engineering), Purdue University, formerly with E-Technologies
[LinkedIn](#)

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or [Request A Quote](#)

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"FaceTec", "UR", and "ZoOm" are Registered Trademarks of FaceTec, Inc.
The 3D FaceMap creation UI is covered by numerous United States and International Patents.



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